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OM protein - protein search, using sw model

Run on: March 1, 2001, 15:47:24 ; Search time 210.42 Seconds
(without alignments)
9.750 Million cell updates/sec

Title: US-09-331-631A-21_COPY_32_91
Perfect score: 343
Sequence: 1 TENPCACORCIOSCOEPPDDL.....DTGATNORHPGERTGRGP 60

Scoring table: BIOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 268485 seqs, 34193795 residues
Total number of hits satisfying chosen parameters: 268485

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :

1: A_Geneseq_36.*
2: /SIDSI/gcgdata/geneseq/geneseqp/AA1980.DAT.*
3: /SIDSI/gcgdata/geneseq/geneseqp/AA1981.DAT.*
4: /SIDSI/gcgdata/geneseq/geneseqp/AA1982.DAT.*
5: /SIDSI/gcgdata/geneseq/geneseqp/AA1983.DAT.*
6: /SIDSI/gcgdata/geneseq/geneseqp/AA1984.DAT.*
7: /SIDSI/gcgdata/geneseq/geneseqp/AA1985.DAT.*
8: /SIDSI/gcgdata/geneseq/geneseqp/AA1986.DAT.*
9: /SIDSI/gcgdata/geneseq/geneseqp/AA1987.DAT.*
10: /SIDSI/gcgdata/geneseq/geneseqp/AA1988.DAT.*
11: /SIDSI/gcgdata/geneseq/geneseqp/AA1990.DAT.*
12: /SIDSI/gcgdata/geneseq/geneseqp/AA1991.DAT.*
13: /SIDSI/gcgdata/geneseq/geneseqp/AA1992.DAT.*
14: /SIDSI/gcgdata/geneseq/geneseqp/AA1993.DAT.*
15: /SIDSI/gcgdata/geneseq/geneseqp/AA1994.DAT.*
16: /SIDSI/gcgdata/geneseq/geneseqp/AA1995.DAT.*
17: /SIDSI/gcgdata/geneseq/geneseqp/AA1996.DAT.*
18: /SIDSI/gcgdata/geneseq/geneseqp/AA1997.DAT.*
19: /SIDSI/gcgdata/geneseq/geneseqp/AA1998.DAT.*
20: /SIDSI/gcgdata/geneseq/geneseqp/AA1999.DAT.*
21: /SIDSI/gcgdata/geneseq/geneseqp/AA2000.DAT.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	343	100.0	614	18 W22149	Peanut allergen Ar
2	343	100.0	614	19 W62834	Arachis hypogaea a
3	318	92.7	626	18 W22150	Peanut allergen Ar
4	318	92.7	626	20 Y15244	Peanut allergen, A
5	318	92.7	626	20 Y25657	Peanut allergen, I1
6	93	27.1	605	19 W62838	Glycine max anti1
7	89	25.9	605	20 Y40999	Soybean beta-congl
8	69.5	20.3	625	19 W62830	Macadamia integrif
9	68.5	20.0	666	19 W62829	Macadamia integrif
10	66.5	19.4	477	16 R74175	Human collagenin
11	66.5	19.4	590	19 W62832	Gossypium hirsutum
12	66.5	19.4	771	16 R71380	Human semaphorin I

13	66.5	19.4	796	19 Y21264	Human semaphorin I
14	64.5	18.8	666	19 W62828	Macadamia integrif
15	64	18.7	1036	21 Y82776	Human chorion rela
16	64	18.7	1036	21 Y53034	Human secreted pro
17	63.5	18.5	1524	20 Y15458	Human laminin gamma
18	60.5	17.6	149	8 P70057	Human insulin rece
19	60.5	17.6	777	21 Y27127	Human brain tissue
20	60.5	17.6	777	21 Y99427	Human PRO1491 (UNG
21	60.5	17.6	1105	20 Y15459	SEQ ID 5 of W09919
22	60.5	17.6	1761	20 Y15457	Human laminin beta
23	60	17.5	282	20 W86225	Human VEGF-C trunc
24	60	17.5	297	20 W86224	Human VEGF-C trunc
25	60	17.5	302	20 W86223	Human VEGF-C trunc
26	60	17.5	307	20 W86222	Human VEGF-C trunc
27	60	17.5	318	20 W08284	Human growth facto
28	60	17.5	350	16 R82686	Vascular endothell
29	60	17.5	350	20 Y30519	A truncated vascul
30	60	17.5	350	20 Y22321	Truncated human VE
31	60	17.5	399	20 W86237	Human VEGF-C full
32	60	17.5	419	18 W17837	Human foetal liver
33	60	17.5	419	18 W00932	Human Flt4 recepto
34	60	17.5	419	18 W13833	Human vascular end
35	60	17.5	419	18 W11478	Human vascular end
36	60	17.5	419	19 W75751	Vascular endothell
37	60	17.5	419	19 W75740	Human vascular end
38	60	17.5	419	20 Y30518	Human vascular end
39	60	17.5	419	20 Y22320	Vascular endothell
40	60	17.5	419	20 W86203	Full length human
41	60	17.5	419	21 Y70982	Human vascular end
42	59.5	17.3	318	20 Y38613	Human vascular end
43	59.5	17.3	1013	19 W61539	Neisseria gonorrhoe
44	59.5	17.3	1013	19 W40223	Human cardiac/brai
45	59.5	17.3	1013	19 W40224	Murine mfl protei
					Human tollid-like

ALIGNMENTS

RESULT 1	
ID W22149	standard; Protein; 614 AA.
XX	
AC W22149;	
XX	
DT 29-DEC-1997	(first entry)
XX	
DE	Peanut allergen Ara h1.
XX	
KW	Peanut; seed storage protein; allergen; allergy; hypersensitivity;
KW	vacuole; anaphylactic shock; immunotherapy; therapy;
KW	monoclonal antibody; ELISA; analysis; Ara h1.
XX	
OS	Arachis hypogaea strain Florunner.
XX	
FH	Key
FT	Peptide
FT	Location/Qualifiers
FT	1..22
FT	/label= Sig-peptide
FT	Protein
FT	/label= Mat-protein
FT	Modified-site
FT	521..523
FT	/note="N-glycosylation site"
XX	
PN	W09724139-A1.
XX	
PD	10-JUL-1997.
XX	
PF	23-SEP-1996;
XX	96WO-US15222.
PR	04-MAR-1996;
XX	96US-0610424.
PR	29-DEC-1995;
XX	95US-0009455.
XX	
PA	(UYAR-) UNIV ARKANSAS.
XX	

PI Bannon GA, Burks AW, Cockrell G, Helm RM, Stanley JS;
 XX
 DR WPI; 1997-363453/33.
 DR N-PSDB; T76612.
 XX
 PT Peanut allergens Ara hi and Ara hii - used for vaccination and in
 PT two-site monoclonal antibody based ELISA
 XX
 PS Claim 31; Page 169; 354pp; English.
 PS
 CC This polypeptide comprises major peanut allergen Ara hi (W22149).
 CC Its sequence was deduced from cDNA clone P17 (T76612), isolated
 CC from peanut seed cDNA using a primer (see T76616) based on an
 CC isolated Ara hi peptide (see W24206). The sequence shows
 CC significant homology with the vicilin family of seed storage
 CC proteins of other legumes. The allergen is recognised by serum
 CC IgE from a large proportion of individuals with peanut
 CC hypersensitivity. Ara hi and Ara hii (see W24164) can be used to
 CC raise monoclonal antibodies which are used in a specific two-site
 CC Mab ELISA for the detection of Ara hi or Ara hii (claimed). IgE-
 CC binding Ara hi antigen epitopes (see W24165-87) may be used in
 CC vaccines to protect against allergic reactions to peanut allergens,
 CC e.g. anaphylactic shock.
 CC
 SQ Sequence 614 AA;

Query Match 100.0%; Score 343; DB 18; Length 614;
 Best Local Similarity 100.0%; Pred. No. 1.3e-32;
 Matches 60; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 TENPCAGRCLOSCQOEPPDLKQKACSRCTKLEYDPKCVYDTGATNQHPGERTGRGP 60
 Db 32 tempcaqrclsqcqpddlkqkacsrckleydpkcvydtgatnqhrppgertgrgp 91

RESULT 2

W62834 ID W62834 standard; Peptide: 614 AA.

XX AC W62834;

XX DT 27-OCT-1998 (first entry)

XX DE Arachis hypogaea antimicrobial protein.

XX KM antimicrobial protein; infestation; control.

XX OS Arachis hypogaea.

XX PN WO9827805-A1.

XX PD 02-JUL-1998.

XX PF 22-DEC-1997; 97WO-AU00874.

XX PR 20-DEC-1996; 96AU-0004275.

XX PA (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.

XX PI Bower NI, Goulter KC, Green JL, Manners JM, Marcus JP;

XX WPI; 1998-377279/32.

XX DR Novel anti-microbial protein from e.g. Macadamia integrifolia -

XX PT useful for controlling microbial infestations of plants or mammals

XX PS Claim 1; Page 55-57; 96pp; English.

XX CC The sequence is that of an antimicrobial protein which can
 CC be used to control microbial infestations in plants and mammalian
 CC animals.
 CC
 XX

SQ Sequence 614 AA;

Query Match 100.0%; Score 343; DB 19; Length 614;
 Best Local Similarity 100.0%; Pred. No. 1.3e-32;
 Matches 60; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 TENPCAGRCLOSCQOEPPDLKQKACSRCTKLEYDPKCVYDTGATNQHPGERTGRGP 60
 Db 32 tempcaqrclsqcqpddlkqkacsrckleydpkcvydtgatnqhrppgertgrgp 91

RESULT 3

W22150 ID W22150 standard; Protein: 626 AA.

XX AC W22150;

XX DT 29-DEC-1997 (first entry)

XX DE Peanut allergen Ara hi.

XX KM Peanut; seed storage protein; allergen; allergy; hypersensitivity;

XX KM vaccine; anaphylactic shock; immunotherapy; therapy;

XX KM monoclonal antibody; ELISA; analysis; Ara hi.

XX OS Arachis hypogaea strain Florunner.

XX FH Key Location/Qualifiers

XX FT Peptide 1..22

XX FT Protein /label= Sig-peptide

XX FT Modified-site /label= Mat-protein

XX FT 521..523 /note="N-glycosylation site"

XX PN WO9724139-A1.

XX PD 10-JUL-1997.

XX PF 23-SEP-1996; 96WO-US15222.

XX PR 04-MAR-1996; 96US-0610424.

XX PR 29-DEC-1995; 95US-0009455.

XX PA (UYAR-) UNIV ARKANSAS.

XX PI Bannon GA, Burks AW, Cockrell G, Helm RM, Stanley JS;

XX DR WPI; 1997-363453/33.

XX DR N-PSDB; T76613.

XX PT Peanut allergens Ara hi and Ara hii - used for vaccination and in

XX PT two-site monoclonal antibody based ELISA

XX PS Claim 31; Page 172; 354pp; English.

XX CC This polypeptide comprises major peanut allergen Ara hi (W22149).

XX CC Its sequence was deduced from cDNA clone P41b (T76613), isolated

XX CC from peanut seed cDNA using a primer (see T76616) based on an

XX CC isolated Ara hi peptide (see W24206). The sequence shows

XX CC significant homology with the vicilin family of seed storage

XX CC proteins of other legumes. The allergen is recognised by serum

XX CC IgE from a large proportion of individuals with peanut

XX CC hypersensitivity. Ara hi and Ara hii (see W24164) can be used to

XX CC raise monoclonal antibodies which are used in a specific two-site

XX CC Mab ELISA for the detection of Ara hi or Ara hii (claimed). IgE-

XX CC binding Ara hi antigen epitopes (see W24165-87) may be used in

XX CC vaccines to protect against allergic reactions to peanut allergens,
 XX CC e.g. anaphylactic shock.
 XX
 SQ Sequence 626 AA;

Query Match 92.7%; Score 318; DB 18; Length 626;
 Best Local Similarity 90.6%; Pred. No. 1.2e-29;
 Matches 58; Conservative 0; Mismatches 2; Indels 4; Gaps 1;

OY 1 TENPCAQCRCSCQOEPDDIKQKACESRCTKLEYDPRCYVD---TGATNQRHPGERTR 56
 |||||
 Db 34 tempcaqrclqscqgqdpddlkqkacesrctkleydprcvydpgrhgtltngrspgpertr 93

OY 57 GRGP 60
 ||||
 Db 94 grqp 97

RESULT 4
 ID Y15244
 Y15244 standard; protein; 626 AA.

XX Y15244;
 AC Y15244;
 XX 09-NOV-1999 (first entry)
 DT
 XX Peanut allergen, Ara h 1, amino acid sequence.
 DE
 XX allergy; immune response; transgenic; allergen; epitope;
 KM immunoglobulin E; Ig E; binding site; peanut.
 XX
 OS Arachis hypogaea.
 XX
 PN WO9939878-A1.
 XX
 PD 05-AUG-1999.
 XX
 PF 29-JAN-1999; 99WO-US02031.
 XX
 PR 27-AUG-1998; 98US-0141220.
 PR 31-JAN-1998; 98US-0073283.
 PR 13-FEB-1998; 98US-0074590.
 PR 13-FEB-1998; 98US-0074624.
 PR 13-FEB-1998; 98US-0074633.
 XX
 PA (SOSI/) SOSIN H.
 PA (UTAR-) UNIV ARKANSAS.
 PA (UYNY) UNIV NEW YORK MT SINAI SCHOOL MEDICINE.
 XX
 PI Bannon GA, Burks AW, Sampson HA, Sosin H;
 XX
 DR WPI; 1999-479189/40.
 DR N-PSDB; Z06382.
 XX
 PT Modified allergen with reduced IgE binding, useful for treating e.g.
 PT allergies
 XX
 PS Disclosure; Page 35-37; 46pp; English.
 XX
 CC This is the amino acid sequence of the Ara h 1 protein from Arachis
 CC hypogaea. The Ara h 1 protein has 23 IgE (Immunoglobulin E) binding
 CC epitopes, four of which are immunodominant (Y15247, Y15249, Y15250 and
 CC Y15263).
 CC By modifying the IgE binding sites the ability of the allergen to
 CC provoke an immune response is downregulated. The epitopes of the IgE
 CC binding sites can therefore be modified in genetically engineered plants
 CC and animals to elicit less of an allergic response.
 CC
 XX
 SQ Sequence 626 AA;

Query Match 92.7%; Score 318; DB 20; Length 626;
 Best Local Similarity 90.6%; Pred. No. 1.2e-29;
 Matches 58; Conservative 0; Mismatches 2; Indels 4; Gaps 1;

OY 1 TENPCAQCRCSCQOEPDDIKQKACESRCTKLEYDPRCYVD---TGATNQRHPGERTR 56
 |||||
 Db 34 tempcaqrclqscqgqdpddlkqkacesrctkleydprcvydpgrhgtltngrspgpertr 93

Db 34 tempcaqrclqscqgqdpddlkqkacesrctkleydprcvydpgrhgtltngrspgpertr 93
 OY 57 GRGP 60
 ||||
 Db 94 grqp 97

RESULT 5
 ID Y25657
 Y25657 standard; protein; 626 AA.

XX Y25657;
 AC Y25657;
 XX 30-SEP-1999 (first entry)
 DT
 XX Peanut allergen 1168391 Ara h 1 protein fragment.
 DE
 XX Major histocompatibility complex; class II; desensitizing; human;
 KM allergen; grass; tree; weed; pollen; fungi; mould; food; insect; sting;
 KM chironomidae; spider; mite; housefly; fruit fly; sheep blow fly; honeybee;
 KM screw worm fly; grain weevil; silkworm; bee moth; larvae; mealworm; cat;
 KM cockroach; beetle; dog; horse; cow; pig; sheep; rabbit; rat; guinea pig;
 KM mice; gerbil; vaccine; treatment; prevention; hypersensitivity; peanut.
 XX
 OS Arachis hypogaea.
 XX
 PN WO9934826-A1.
 XX
 PD 15-JUL-1999.
 XX
 PF 11-JAN-1999; 99WO-GB00080.
 XX
 PR 21-SEP-1998; 98GB-0020474.
 PR 09-JAN-1998; 98GB-0000445.
 XX
 PA (IMCO-) IMPERIAL COLLEGE INNOVATIONS LTD.
 XX
 PI Kay AB, Larche M;
 XX
 DR WPI; 1999-458255/38.
 XX
 PT Desensitizing patients to polypeptide allergens
 PT
 XX
 PS Example 6; Page 70-71; 117pp; English.
 XX
 CC This invention describes a novel method of desensitizing a patient to a
 CC polypeptide allergen and comprises administering to the patient a peptide
 CC derived from the allergen where restriction to a MHC Class II molecule
 CC possessed by the patient can be demonstrated for the peptide and the
 CC peptide is able to induce a late phase response in an individual who
 CC possesses the MHC Class II molecule. The methods can be used for
 CC desensitizing patients to allergens present in e.g. grass, tree and weed
 CC (including ragweed) pollens, fungi and moulds, foods, stinging insects,
 CC the chironomidae (non-biting midges), spiders and mites, housefly, fruit
 CC fly, sheep blow fly, screw worm fly, grain weevil, silkworm, honeybee,
 CC non-biting midge larvae, bee moth larvae, mealworm, cockroach, larvae of
 CC Teniprio mollitor beetle, mammals such as cat, dog, horse, cow, pig,
 CC sheep, rabbit, rat, guinea pig, mice or gerbil. They can also be used to
 CC produce immunological vaccines which may be used to prevent and/or treat
 CC conditions involving hypersensitivity to allergens. This sequence
 CC represents a peanut (Arachis hypogaea) allergen 1168391 Ara h 1.
 CC
 XX
 SQ Sequence 626 AA;

Query Match 92.7%; Score 318; DB 20; Length 626;
 Best Local Similarity 90.6%; Pred. No. 1.2e-29;
 Matches 58; Conservative 0; Mismatches 2; Indels 4; Gaps 1;

OY 1 TENPCAQCRCSCQOEPDDIKQKACESRCTKLEYDPRCYVD---TGATNQRHPGERTR 56
 |||||
 Db 34 tempcaqrclqscqgqdpddlkqkacesrctkleydprcvydpgrhgtltngrspgpertr 93

OY 57 GROP 60
 DB 94 grgp 97

RESULT 6

ID W62838 standard; Protein: 605 AA.

AC W62838;

DT 27-OCT-1998 (first entry)

DE Glycine max antimicrobial protein.

KW antimicrobial protein; infestation; control.

OS Glycine max.

PN W09827805-A1.

XX 02-JUL-1998.

PF 22-DEC-1997; 97WO-AU00874.

PR 20-DEC-1996; 96AU-0004275.

PA (REFR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.

PI Bower NI, Goulter KC, Green JL, Manners JM, Marcus JP;

DR WPI; 1998-377279/32.

XX Novel anti-microbial protein from e.g. Macadamia integrifolia -

PT useful for controlling microbial infestations of plants or mammals

XX Claim 1; Page 63-65; 96pp: English.

CC The sequence is that of an antimicrobial protein which can

CC be used to control microbial infestations in plants and mammalian

XX animals.

SQ Sequence 605 AA:

Query Match 27.1%; Score 93; DB 19; Length 605;

Best Local Similarity 31.4%; Pred. No. 0.0035;

Matches 22; Conservative 8; Mismatches 16; Indels 24; Gaps 3;

OY 2 ENPCAOBCLSCQOEPPDLKQKACESRCTKLEYD-----PRCYVDGTATNORHP 50

DB 31 enpkhmkclqscnsersdyngacharcnllkveeceegeelprpr-----prpqhp 83

OY 51 -----PGER 54

DB 84 erepqgpgex 93

RESULT 7

ID Y40999 standard; Protein: 605 AA.

AC Y40999;

DT 06-DEC-1999 (first entry)

DE Soybean beta-conglycinin protein sequence.

KW Peanut; allergen; Ara H 1; IGE; immunoglobulin E; epitope; Ara h 3;

XX allergic reaction; soybean; beta-conglycinin.

OS Glycine max.

PN W0945961-A1.

XX 16-SEP-1999.

PF 12-MAR-1999; 99WO-US05494.

PR 12-MAR-1998; 98US-0077763.

PR 11-MAR-1999; 99US-0077763.

PA (UYAR-) UNIV ARKANSAS.

PI Burks W, Helm RM, Cockrell G, Bannon GA, Stanley JS, Shin DS;

PI Sampson H, Compadre CW, Huang SK, Maleki SJ, Kopper RA;

DR WPI; 1999-551218/46.

PT Tertiary structure of peanut allergen Ara h 1 for protection of a host

PT animal from allergic reaction -

PS Disclosure; Fig 33A-B; 193pp: English.

CC The invention provides a tertiary structure for the peanut allergen

CC Ara H 1. The Ara H 1 allergen is found to contain 23 linear IGE-binding

CC epitopes. The invention also provides an isolated recombinant peanut

CC allergen designated Ara h 3 and a nucleotide molecule encoding the peanut

CC animal from allergic reaction, particularly using a modified allergen

CC which is less reactive with IGE. The invention may also be used to

CC ensure that the allergen is not introduced into genetically modified

CC food. The present sequence represents a soybean beta-conglycinin protein

CC sequence.

XX SQ Sequence 605 AA;

Query Match 25.9%; Score 89; DB 20; Length 605;

Best Local Similarity 30.0%; Pred. No. 0.01;

Matches 21; Conservative 9; Mismatches 16; Indels 24; Gaps 3;

OY 2 ENPCAOBCLSCQOEPPDLKQKACESRCTKLEYD-----PRCYVDGTATNORHP 50

DB 31 kpkhmkclqscnsersdyngacharcnllkveeckxgelprr-----prpqhp 83

OY 51 -----PGER 54

DB 84 erepqgpgex 93

RESULT 8

ID W62830 standard; Protein: 625 AA.

AC W62830;

DT 27-OCT-1998 (first entry)

DE Macadamia integrifolia antimicrobial protein.

KW antimicrobial protein; infestation; control.

OS Macadamia integrifolia.

PN W09827805-A1.

XX 02-JUL-1998.

PF 22-DEC-1997; 97WO-AU00874.

XX	RESULT	11
ID	W62832	
AC	W62832 standard; Protein; 590 AA.	
XX	W62832;	
DT	27-OCT-1998	(first entry)
XX	Gossypium hirsutum antimicrobial protein.	
DE	Gossypium hirsutum antimicrobial protein.	
XX	antimicrobial protein; infestation; control.	
KW	Gossypium hirsutum.	
OS		
XX		
PN	WO9827805-A1.	
PD	02-JUL-1998.	
XX		
PF	22-DEC-1997;	97WO-AU00874.
XX		
PR	20-DEC-1996;	96AU-0004275.
XX		
PA	(RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.	
XX		
PI	Bower NI, Goulter KC, Green JL, Manners JM, Marcus JP;	
XX		
DR	WPI; 1998-377279/32.	
XX		
PT	Novel anti-microbial protein from e.g. Macadamia integrifolia -	
XX	useful for controlling microbial infestations of plants or mammals	
PS	Claim 1; Page 49-51; 96pp; English.	
XX		
CC	The sequence is that of an antimicrobial protein which can	
CC	be used to control microbial infestations in plants and mammalian	
CC	animals.	
XX		
SQ	Sequence	590 AA;

	Query Match	19.4%	Score 66.5;	DB 19;	Length 590;	
	Best Local Similarity	31.6%	Pred. No. 4.5;			
Matches	18; Conservative	10; Mismatches	22; Indels	7; Gaps	3;	
QY	5 CAQRCLSCSQOEPPDLKQ-KACESRCTKLEYDP---RCVYDYGATNRHP-PGER 54					
	I I I I I : I I : : I : I : I I I I : I I I I					
Db	105 cqrclrkfegedqgsgrfqfgcdqchqgqdprpkkgqvcrekrekygenpwurger 161					
RESULT	12					
R71380						
ID	R71380 standard; Protein; 771 AA.					
XX						
AC	R71380;					
XX						
DT	21-NOV-1995 (first entry)					
XX						
DE	Human semaphorin III protein.					
XX						
Semaphorin; grasshopper; human; vaccinia virus; Drosophila; Tribolium;						
KM varicella major virus; smallpox; semaphorin receptor binding activity;						
KM modulation; nerve cell growth; immune response; viral pathogenesis;						
KM neurological disease; neuro-regeneration; oncological infection.						
XX						
Homo sapiens.						
OS						
PN	WO9507706-A.					
XX						
PD	23-MAR-1995.					
XX						
PF	13-SEP-1994; 94WO-US10151.					
XX						
13-SEP-1993; 93US-0121713.						
RR						

XX	(REGC) UNIV CALIFORNIA.
PA	
XX	
PI	Bentley DR, Goodman CS, Kolodkin AL, Matthes D:
PI	O'Connor T;
XX	
XX	WPI: 1995-131177/17.
DR	N-PSDB; 087442.
XX	
XX	
PT	New class of semaphorin peptide(s) and polypeptide(s) - are
PT	potent modulators of nerve cell growth and regeneration
PS	
XX	
XX	Example 2: Page 60-63; 101pp; English.
XX	
CC	The sequence of the human semaphorin III protein. The proteins
CC	encoded by the grishnopper semaphorin I (087441), human semaphorin III,
CC	vacccinia virus semaphorin IV (087443), Drosophila semaphorin I and II
CC	(087444-5), Tribolium semaphorin I (087445) or variola major (smallpox)
CC	virus semaphorin IV (087447) genes were used to generate a series of
CC	peptides (R0370-R70418), which retain semaphorin receptor binding
CC	activity. The semaphorin derived or semaphorin receptor derived peptides
CC	are potent modulators of nerve cell growth, immune responsiveness and
CC	viral pathogenesis. They can be used in diagnosis and treatment of
CC	neurological disease and neuro-regeneration, immune modulation and
CC	diagnosis and treatment of viral and oncological infection and diseases.
XX	
XX	
XX	Sequence 771 AA;
XX	

```

Query Match      19.4%  Score 66.5:  DB 16; Length 771:
Best Local Similarity 35.2%:  Pred. No. 6:
Matches 19; Conservative 5; Mismatches 23; Indels 7; Gaps 2
OY      6 AORCTGSCQEPDDIKQACACSRCTKLEYDPRCVYDTGATNORHPPERTGRQ 59
ob      510 aqqlphr-----dlygkacaccc--lardypcawdgscstsyfplakrrrrg 556

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RESULT	13
ID	y21264
	y21264 standard; Protein: 796 AA.
XX	
AC	y21264;
XX	
DT	22-JUL-1999 (first entry)
XX	
DE	Human semaphorin III wild type protein fragment 1.
KW	Human; beta-amyloid precursor protein; beta-APP; diagnosis; cancer;
KW	frameshift mutation; age-related disease; neurodegenerative disorder;
KW	Huntington's disease; Down's syndrome; myotonic dystrophy; neuronal;
KW	Huntington's disease; multiple sclerosis; alcoholic liver disease;
KW	diabetes mellitus type II; microtubule associated protein; Tau; Big Tau;
KW	ubiquitin B; apolipoprotein E; MAP2; neurofilament-L; neurofilament-M;
KW	neurofilament-F; presenilin I; presenilin II; cellular tumor antigen;
KW	glial fibrillary acidic protein; GFAP; p53; semaphorin III; HUPF-1;
KW	bcl-2; B-cell leukemia/lymphoma 2 proto-oncogene; HMGP-C; NSP-A;
KW	high mobility group protein-C; neuroendocrine specific protein A.
XX	
OS	Homo sapiens.
XX	
PN	w09845322-A2.
XX	
DD	15-OCT-1998.
XX	
PF	02-APR-1998; 98WO-IB00705.
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PR	10-APR-1997; 97US-0043163.
XX	
PA	(UYUT-) RIJXSUNIV UTRECHT.
PA	(ROYA-) ROYAL NETHERLANDS ACAD ARYS & SCT.
PA	(UYRO-) UNIV ROTTERDAM ERASMUS.
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